

IN THE CLAIMS

1. Claims 1-6 (canceled)
7. (Currently Amended) A balloon catheter, comprising
  - a) a shaft having a proximal end, a distal end, and a an inflation lumen extending therein; and
    - b) a balloon on the shaft which has an interior in fluid communication with the inflation lumen, and which is formed of a blend of polymeric materials comprising a first polyether block amide polymeric material having a first Shore durometer hardness of about 60D to about 72D and being not more than about 50% by weight of the blend, and a second polyether block amide polymeric material having a second Shore durometer hardness of about 55D to about 70D and less than the first Shore durometer hardness, and the balloon having a rupture pressure not substantially less than a balloon consisting of the first polyether block amide polymeric material.
  8. (Original) The balloon catheter of claim 7 wherein the balloon has a compliance which is not substantially greater than a compliance of a balloon consisting of the first polyether block amide polymeric material.
  9. (Original) The balloon catheter of claim 7 wherein the balloon has a compliance which is not greater than a compliance of a balloon consisting of the first polyether block amide polymeric material.

10. (Original) The balloon catheter of claim 7 wherein the blend has a flexural modulus lower than a flexural modulus of the first polyether block amide polymeric material.

11. (Original) The balloon catheter of claim 7 wherein the balloon has a mean rupture pressure not substantially lower than a balloon consisting of the first polyether block amide polymeric material.

12. (Canceled)

13. (Currently Amended) The balloon catheter of claim 7 wherein the first polyether block amide polymeric material is about 40% by weight of the blend, and the second polyether block amide polymeric material comprises about 20% to about 80% is about 60% by weight of the total blend.

14. (Original) The balloon of claim 7 wherein the second polyether block amide polymeric material comprises about 40% to about 60% by weight of the total blend.

15. (Canceled)

16. (Original) The catheter balloon of claim 7 wherein the first polyether block amide polymeric material comprises about 40% to about 50% by weight of the total blend.

17. (Canceled)

18. (Original) The balloon catheter of claim 7 wherein the first polyether block amide polymeric material has a Shore durometer hardness of about 70D.

19. (Canceled)

20. (Original) The balloon catheter of claim 7 wherein the second polyether block amide polymeric material has a Shore durometer hardness of about 63D.

21. (Original) The balloon catheter of claim 7 wherein the balloon has a compliance of not greater than about 0.045 mm/atm from a nominal to a rated burst pressure of the balloon.

22. (Original) The balloon catheter of claim 7 wherein the balloon has a compliance of not greater than about 0.045 mm/atm over a pressure range of about 8 atm to about 14 atm.

23. (Original) The balloon catheter of claim 7 wherein the balloon has a compliance of about 0.03 mm/atm to about 0.035 mm/atm from a nominal to a rated burst pressure of the balloon.

24. (Original) The balloon of claim 7 wherein the balloon has a flexural modulus which is less than a flexural modulus of a balloon consisting of the first polyether block amide polymeric material.

25. (Currently Amended) The balloon catheter of claim [[4]] 24 wherein the balloon has a flexural modulus of about 10 to about 14 gram/mm which is about 10% to

about 36% less than a flexural modulus of a balloon consisting of the first polyether block amide polymeric material.

26. (Original) The balloon catheter of claim 7 wherein the balloon has a dual wall thickness of about 0.025 to about 0.056 mm, and a nominal outer diameter of about 1.5 to about 5.0 mm.

27. (Currently Amended) A balloon catheter, comprising

- a) an elongated shaft having a proximal end, a distal end, and at least one lumen therein; and
- b) a balloon formed at least in part of a blend of  
a first polyether block amide polymeric material having a first Shore durometer hardness of about 70D ~~to about 72D~~, and being about 30% ~~to about 70%~~ 40% ~~to about 50%~~ by weight of the total blend; and  
a second polyether block amide polymeric material having a second Shore durometer hardness which is less than the Shore durometer hardness first polyether block amide polymeric material and which is about 63D, being about 40% ~~to about 75%~~ 50% to about 60% by weight of the total blend, and the balloon having a rupture pressure not substantially less than a balloon consisting of the first polyether block amide polymeric material.

28. Claims 28-30 (Canceled)

31. (New) The balloon catheter of claim 7 wherein the balloon rupture pressure is not more than about 5% to about 15% less than the burst pressure of the balloon consisting of the first polyether block amide polymeric material.